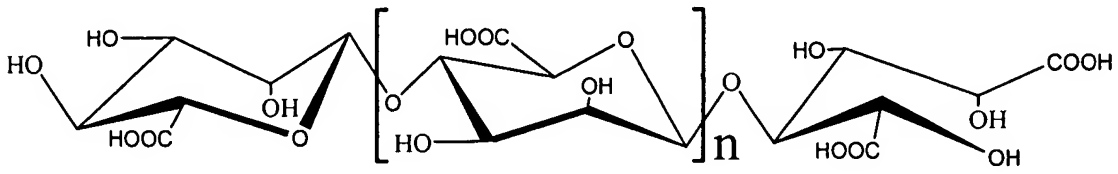
Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

We claim:

1-10 (cancel)

11.(new) Alginate oligosaccharide derivatives or their pharmaceutically-acceptable salts, wherein the said alginate oligosaccharide derivatives are composed of β-D-mannuronic acid linked by 1,4 glycosidic bonds, wherein the reduced terminal in position 1 is carboxyl radical, as shown by the following formula II:



(II)

wherein, n represents 0 or an integer of 1 to 19.

12. (new) The alginate oligosaccharide derivatives or their pharmaceutically-acceptable salts according to claim 11, wherein n is 2 to 10.

13. (new) The alginate oligosaccharide derivatives or their pharmaceutically-acceptable salts according to claim 12, wherein n is 4 to 8.

14. (new) A process for preparing the alginate oligosaccharide derivatives or their pharmaceutically-acceptable salts according to claim 11, the process comprising the following steps in order:

acid hydrolysis step: an alginate aqueous solution is reacted for about 2 to 6 hrs in an autoclave at pH 2-6 and a temperature of about 100-120°C;

pH-adjusting step: after the said acid hydrolysis reaction is stopped, the value of pH is adjusted to about 7;

oxidative degradation step: an oxidant is added and reacted for 15 min to 2 hrs at a temperature of 100-120°C;

pH-adjusting step: after the said oxidative degradation reaction is stopped, the value

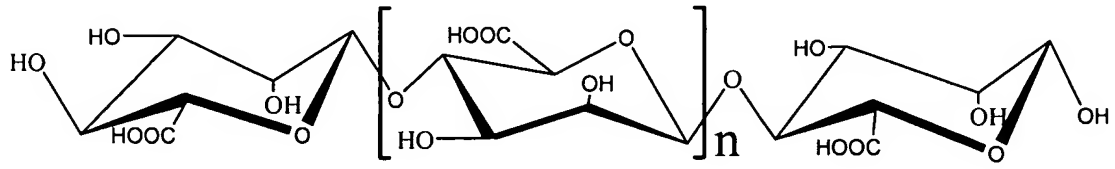
of pH is adjusted to about 7;

15. (new) The process according to claim 14, wherein the said alginate is sodium alginate and the said acid hydrolysis reaction is carried out for 4 hrs under the condition of pH 4 and 110°C.

16. (new) The process according to claim 14, wherein after adjusting the pH to about 7, alcohol is added to give a precipitate; the precipitate is filtered off with suction, dehydrated, dried and desalted.

17. (new) The process according to claim 14, wherein the said oxidant is copper hydroxide and the oxidative degradation is performed for 30 min at a temperature of 100°C.

18. (new) The use of a mannuronic acid oligosaccharide represented by formula I in the preparation of any one selected from the group consisting of a medicament for the prophylaxis and treatment of Alzheimer's disease, an amyloid-β protein fibrils forming inhibitor, a medicament for the prophylaxis and treatment of diabetes, an islet amyloid protein fibrils forming inhibitor and a fibrils disaggregating promoter,



(I)

wherein, n represents 0 or an integer of 1 to 19.

19. (new) A pharmaceutical composition comprising an effective amount of the mannuronic acid oligosaccharide derivatives according to claim 11 and pharmaceutically-acceptable carriers.

20. (new) The pharmaceutical composition according to claim 19, wherein the said composition is any one selected from the group consisting of a medicament for the prophylaxis and treatment of Alzheimer's disease, an amyloid-β protein fibrils forming inhibitor, a medicament for the prophylaxis and treatment of diabetes, an islet amyloid protein fibrils forming inhibitor and a fibrils disaggregating promoter.